



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,499	03/04/2002	Anthony J. Dezonno	6065-82964	6038

24628 7590 04/04/2007
WELSH & KATZ, LTD
120 S RIVERSIDE PLAZA
22ND FLOOR
CHICAGO, IL 60606

EXAMINER

GENACK, MATTHEW W

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/090,499	Applicant(s) DEZONNO ET AL.	
	Examiner Matthew W. Genack	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 16 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 16, the phrases "the engine" and "the objectives of the organization" both lack antecedent basis.

Regarding Claim 20, the phrase "limited to agenda" is grammatically incorrect because there is no article ("an" or "the") prior to "agenda", which renders said phrase ambiguous. Also, this instance of the word "agenda" lacks antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 5-8, 12-15, and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Alpdemir, U.S. Patent Application Publication 2002/0035474.

Art Unit: 2617

Regarding Claims 1, 8, and 15, Alpdemir discloses a method, system, and business model for an information system and service having business self-promotion features whereby consumers call an information center associated with a business using a regular telephone (Abstract, [0002] Lines 1-7, [0018], Fig. 1). A live agent may handle some calls ([0059], [0110] Lines 1-7). A caller may submit a query pertaining to the activities of the business ([0002], [0018], [0085], [0094], [0141] Lines 1-5). The user's question can then be translated into Voice Extensible Markup Language (VXML) with a speech-to-text (STT) conversion engine ([0138] Lines 1-17, Fig. 1). Artificial intelligence is used in the processing and answering of the query ([0141] Lines 7-9). A text-to-speech (TTS) engine and speech server are used to provide the answer to the caller (Abstract, [0139] Lines 1-5, [0143] Lines 1-11, Fig. 1).

Regarding Claims 5 and 12, it is inherent that an artificial intelligence engine used for answering caller's queries would utilize the expertise and inputs associated with a live agent.

Regarding Claims 6 and 13, Alpdemir discloses that a personal computer (PC), personal digital assistant (PDA), or other appliance capable of displaying HTML pages may submit a query to the information center (Abstract, [0139] Lines 8-19, Fig. 1).

Regarding Claim 7, the queries are limited to pertaining to the activities of the business, as outlined above.

Art Unit: 2617

Regarding Claim 14, Alpdemir discloses that a user may inquire about a category, a category and a location, or any item or combination of items ([0108]).

Regarding Claim 18, a live agent may handle some calls, as outlined above.

Regarding Claim 19, Alpdemir discloses that a query may be submitted via email ([0054]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alpdemir in view of Gavan *et. al.*, U.S. Patent No. 6,601,048, further in view of Dezonmo, U.S. Patent No. 6,233,333.

Alpdemir does not expressly disclose the use of a caller call record by the artificial intelligence engine in the processing of a call.

Gavan *et. al.* discloses a system and method for processing event records for the purposes of detecting and managing fraud (Abstract, Column 2 Lines 18-28). Specifically, in the context of telecommunications fraud detection, artificial intelligence is used to monitor event records that are stored in a call history database, said records containing information pertaining to the identity of the caller and the called parties (Column 3 Lines 38-64, Column 11. Lines 4-65, Figs. 2 and 4).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Alpdemir by providing for use of call records, said call records containing information pertaining to identity and contact history, by an artificial intelligence engine in the processing of a call.

One of ordinary skill in the art would have been motivated to make this modification so as to provide a less rigid system of pattern analysis in the processing of a telecommunications traffic (Gavan *et. al.*: Column 2 Lines 6-15).

Neither Alpdemir nor Gavan *et. al.* expressly discloses the simultaneous delivery of a caller call record and said caller's call to a network device.

Dezonmo discloses an apparatus and method for identifying a call record that is to be delivered from one automatic call distributor to another automatic call distributor (Abstract, Column 2 Line 60 to Column 3 Line 13, Figs. 1-2). Customer records for a caller, and said caller's call, are delivered to a selected agent simultaneously (Column 7 Lines 30-44).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Alpdemir as modified by Gavan *et. al.* by providing for the simultaneous delivery of a caller's call and call records to the artificial intelligence engine.

One of ordinary skill in the art would have been motivated to make this modification in order to expedite the handling of the call (Dezonmo: Column 7 Line 55 to Column 8 Line 3).

Art Unit: 2617

7. Claims 3-4, 10-11, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alpdemir in view of Saylor et. al., U.S. Patent No. 6,792,086.

Regarding Claims 3, 10, and 17, Alpdemir does not expressly disclose the conversion of an answer into an extensible markup language.

Saylor et. al. discloses a system and method whereby voice codes store content, said content being accessible by telephone (Abstract, Column 1 Lines 62-66, Column 5 Lines 12-14). A user calls a call processing center, and said call center processes an information request from said user via a voice browser module that uses speech recognition to interpret the user's request for information. This information may be disseminated by an organization whose purpose is commerce-related (Column 3 Lines 36-41, Column 5 Lines 41-42 and 55). The user may ask a business-related question (Column 17 Lines 13-16). The VXML information may be passed through a TTS in order to create a sound file that is subsequently played for the user (Column 8 Lines 16-34); alternatively, the VXML information may delivered to the user as a text file (Column 8 Lines 34-38).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Alpdemir by providing for the conversion, by the AI engine, of the provided answer into an extensible markup language.

One of ordinary skill in the art would have been motivated to make this modification because the customer may be using a device that is more suited to receiving an answer in extensible markup language form than in the form of

synthesized speech.

Regarding Claims 4 and 11, Alpdemir discloses that the requested information may be passed through a text-to-speech engine and speech server and played on the user's telephone (Abstract, [0139] Lines 1-5, [0143] Lines 1-11, Fig. 1).

Regarding Claim 20, Alpdemir discloses a method, system, and business model for an information system and service having business self-promotion features whereby consumers call an information center associated with a business using a regular telephone (Abstract, [0002] Lines 1-7, [0018], Fig. 1). A live agent may handle some calls ([0059], [0110] Lines 1-7). A caller may submit a query pertaining to the activities of the business ([0002], [0018], [0085], [0094], [0141] Lines 1-5). The user's question can then be translated into Voice Extensible Markup Language (VXML) with a speech-to-text (STT) conversion engine ([0138] Lines 1-17, Fig. 1). Artificial intelligence is used in the processing and answering of the query ([0141] Lines 7-9). A text-to-speech (TTS) engine and speech server are used to provide the answer to the caller (Abstract, [0139] Lines 1-5, [0143] Lines 1-11, Fig. 1). The requested information may be passed through a text-to-speech engine and speech server and played on the user's telephone (Abstract, [0139] Lines 1-5, [0143] Lines 1-11, Fig. 1).

Alpdemir does not expressly disclose the conversion of an answer into an extensible markup language.

Saylor et. al. discloses a system and method whereby voice codes store content, said content being accessible by telephone (Abstract, Column 1 Lines 62-

Art Unit: 2617

66, Column 5 Lines 12-14). A user calls a call processing center, and said call center processes an information request from said user via a voice browser module that uses speech recognition to interpret the user's request for information. This information may be disseminated by an organization whose purpose is commerce-related (Column 3 Lines 36-41, Column 5 Lines 41-42 and 55). The user may ask a business-related question (Column 17 Lines 13-16). An interpreter may be used to provide requested Voice XML information to the user (Column 8 Lines 16-20).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Alpdemir by providing for the conversion, by the AI engine, of the provided answer into an extensible markup language.

One of ordinary skill in the art would have been motivated to make this modification because the customer may be using a device that is more suited to receiving an answer in extensible markup language form than in the form of synthesized speech.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alpdemir in view of Gavan *et. al.*

The metes and bounds of Claim 9 are broader than the metes and bounds of Claim 2. Therefore, the rejection of Claim 2, *sans* Dezonmo, applies to Claim 9.

Response to Arguments

9. Applicant's arguments filed 17 January 2007 have been fully considered but they are not persuasive.

Regarding Claims 1, 8, and 15, Applicant asserts, on Pages 7-8, that "Alpdemir does not disclose the use of an artificial intelligence engine for forming answers to questions from callers as claimed. The citation to Alpdemir pointed out by the Examiner (Paragraph 0141) does not provide a disclosure of the claimed use of an artificial intelligence engine to answer the call center queries at all. Instead, it describes "utilizing natural language speech recognition ("para, 0141, lines 2-3) and merely mentions that artificial intelligence is generally known and that there will be no description of artificial intelligence (See Alpdemir para [0141], line 8-9" ... and artificial intelligence are known in the art and not described in greater detail here"). There is no description of the actual use of artificial intelligence, just the statement that AI is known."

Examiner directs Applicant's attention to the following excerpt from Paragraph 0141: "Embodiments of the inventive system may desirably incorporate and utilize natural language speech recognition." This is the first sentence of Paragraph 0141, and therefore, it is clear that the entirety of this Paragraph exists within the context of "embodiments of the inventive system". It is incumbent on the Applicant to explain why Alpdemir's statement regarding artificial intelligence, in this paragraph, is totally outside of this context, and not pertaining in any way to the inventive system, *e.g.*, a system for providing answers to queries submitted via telephone.

Regarding Claims 2, 9, and 16, Applicant asserts, on Pages 8-9, that "Gavan, concerned with the entirely different issue of looking for fraud patterns in event records, fails to teach or disclose this feature. This use of artificial intelligence on call records to detect fraud patterns in [sic] entirely different from using it to generate context for answers to caller questions about the enterprise activities."

Examiner directs Applicant's attention to the fact that Gavan *et. al.* was not cited for disclosing anything pertaining to the formation of answers, by an AI engine, to queries; rather, Gavan *et. al.* was cited for disclosing an AI engine for the processing of telecommunications records, said records comprising identities and contact histories. This reference, along with Alpdemir, which discloses the use of AI in the answering of voice queries made via telephone, were cited as obviating Claims 2, 9, and 16, since together, these two references disclose each element of said Claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Genack whose telephone number is 571-272-7541. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew Genack

Examiner

TC-2600, Division 2617



29 March 2007



**DUC M. NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**